PAT-NO: JP361178016A

DOCUMENT-IDENTIFIER: JP 61178016 A

TITLE: RECOVERY OF METHANE GAS IN DIGESTION TANK

PUBN-DATE: August 9, 1986

INVENTOR-INFORMATION:
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INT-CL (IPC): B01D053/22, C02F003/28 , C02F011/04

US-CL-CURRENT: 210/603

ABSTRACT:

PURPOSE: To promote methane fermentation while effectively recovering methane gas, by arranging an evacuated polymer membrane chamber in a digestion tank to return the gas passed through a polymer membrane to the digestion tank and taking out non-passed gas as conc. methane gas.

CONSTITUTION: The methane gas formed in an anaerobic methane fermentation digestion tank 1 is taken out from piping 8 to be sent into a polymer membrane chamber 13. Because the chamber 13 is evacuated by a vacuum pump 19 and held to negative pressure, carbon dioxide passes through a polymer membrane 14 and methane gas is left in a non-permeable gas chamber 15. Conc. methane gas is exhausted from a take-out pipe 17. The carbon dioxide transmitted through the membrane is mixed with the gas formed in the digestion tank 1 and the resulting gaseous mixture is discharged into the digestion tank 1

from the nozzle 6 in
the draft tube 5 provided at the central part of the digestion tank 1 to
perform the recirculation of the digestion liquid and the dissolution of carbon
dioxide.



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Abstract Text - FPAR (2):

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International Classification, Secondary - IPCX (1):

C02F003/28